## NATIONAL TRANSPORTATION SAFETY BOARD DEPARTMENT OF TRANSPORTATION WASHINGTON, D.C. 20591

6924 A68-40

TEO 30 1968

Mr. David D. Thomas Acting Administrator Federal Aviation Administration Department of Transportation Washington, D. C. 20590

Dear Mr. Thomas:

On March 23, 1968, the pilot and two of his four passengers lost their lives when the float-equipped Brantly Model 305 helicopter. N2224U, crashlanded and turned over in the Mississippi River.

Examination of the wreckage failed to disclose any evidence of a malfunction or failure that could conceivably cause the pilot to lose control of the aircraft prior to water impact. Also, the pilot's experience, well over 2,000 hours of helicopter time, was considered to be above average, and he was well qualified in the barge heliport operation.

A review of the float-equipped Brantly Model 305 FAA Flight Test Certification Report revealed that left pedal control was objectionable. This report indicated that while hovering under a heavy gross weight condition, crosswind from the left, pedal pressures of 24 to 27 pounds were necessary to turn the aircraft into the wind. However, no corrective action was taken to alleviate this condition, nor any information published in the Airplane Flight Manual which would alert a pilot to this objectionable directional control characteristic.

In light of the above, the Board recommends that a reevaluation of the Flight Test Certification Report should be made to establish whether the float-equipped configuration of the Brantly Model 305 helicopter fully meets the certification controllability and maneuverability requirements and intent of FAR 27.143(c). The Board further believes that the present flight manual does not comply with FAR 27.1581(c) and 27.1585, which state that the flight manual must include any information that is required for safe operation because of unusual design, operation, or handling characteristics. Therefore, the Board

## Mr. Devid D. Thomas (2)

recommends that the flight menual should be revised to include the pertinent information established in the float installation FAA Flight Test Certification Report.

Personnel of your Central Region are aware of the details of this accident and our staff is available for further assistance if required.

## Sincerely yours,

Original staned by Joseph J. O'Connell, Jr.

Joseph J. O'Connell, Jr. Chairman